Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

CC Docket No. 94-102

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In the Matter of)

Revision of the Commission's Rules to Ensure Compatibility with

Enhanced 911 Emergency Calling Systems

U S WEST'S SUPPLEMENTAL COMMENTS

U S WEST, Inc., on behalf of its landline and wireless telecommunications subsidiaries and joint venture interests, submits these supplemental comments regarding the Agreement reached between the Cellular Telecommunications Industry Association ("CTIA") and three national public safety groups. WEST supports the framework of the new Agreement, although there remain several important details which require clarification.

I. INTRODUCTION AND SUMMARY

There has never been disagreement over the ends the Commission has sought to achieve in this proceeding. There was, however, fundamental disagreement over the means the Commission initially proposed to achieve these ends.

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¹ See <u>Public Notice</u>, DA 96-198 (Feb. 16, 1996). The three groups are: National Emergency Number Associations ("NENA"); Association of Public-Safety Communications Officials ("APCO"); and National Association of State Nine One One Administrators ("NASNA").

The Commission originally proposed to adopt a rigid, 1960s-era regulatory approach to the complex issue of the provision of enhanced 911 capabilities to wireless consumers. Under that proposal, all wireless carriers would have been required to deploy over a five-year period certain network capabilities — even though supporting technologies did not then exist and regardless of whether a local public safety organization was capable of using these capabilities. The Notice of Proposed Rulemaking² also overlooked completely the critical issue of cost recovery.

U S WEST proposed, in response, that the Commission instead adopt a more market-driven approach to the availability of enhanced wireless 911 capabilities.³ Specifically, U S WEST recommended that the complex issue of enhanced wireless 911 capabilities be addressed by local or regional negotiations between impacted public safety organizations and impacted carriers (both landline and wireless). These negotiations would allow the industry to focus on the particular needs of each public safety organization, take into account embedded equipment and the state of potential 911 wireless technologies, and give both local public safety organizations and the impacted carriers the flexibility to devise solutions that meet the particular needs of each organization. These negotiations would also allow the parties to discuss appropriate funding mechanisms so the costs incurred by all — carriers and public safety organizations alike — could be recovered.

² Compatibility with Enhanced 911 Emergency Systems, CC Docket No. 94-102, 9 FCC Rcd 6170 (1994)(Notice of Proposed Rulemaking).

³ See U S WEST Comments, Docket No. 94-102 (Jan. 9, 1995).

U S WEST thus welcomes the Agreement reached between CTIA and three national public safety organizations. The Agreement establishes a "process" that appears to be similar to what U S WEST had originally proposed: good faith negotiations between local public safety organizations and carriers (landline and wireless) serving that locality. The Agreement is further important because the national public safety organizations now recognize key facts — namely, that there are inherent limitations imposed by technology and topology and that cost recovery issues must be addressed as a part of developing and implementing any new program.

The process now proposed by CTIA and the three national public safety organizations is one that will work — so long as the details of deployment are left to the impacted local public safety organizations and carriers. A negotiated process will facilitate the expeditious and cost-effective deployment of wireless E911 capabilities that local public safety organizations want and can use. For this reason, U S WEST supports the proposal and urges the Commission to adopt it.

Nonetheless, there are several important details which still require clarification.

The balance of these comments addresses these details.

II. PHASE I ISSUES

Phase I involves "the provision of cell site information using a 7 or 10-digit pseudo-ANI and a 7 or 10-digit caller ANI (i.e., calling party number), depending on the

⁴ See Letter from Thomas E. Wheeler, to the Hon. Reed E. Hundt, FCC Chairman, at 1 (Feb. 12, 1996).

local landline network's signaling capability."⁵ There is now little question that this capability can be made available in relatively short order.⁶ Nevertheless, two issues remain outstanding: (a) when and where this capability will be deployed, and (b) how local public safety organizations and carriers will recover their Phase I deployment and operational costs.

A. <u>Phase I Deployment</u>. CTIA "believes" that Phase I should be deployed 18 months from the Commission's adoption of rules, while the national public safety organizations "prefer" deployment in 12 months.⁷ Both sides miss the mark.

It makes no sense for a wireless carrier to deploy a new capability like Phase I if the local public safety organizations operating within its service area have no need for, or are unable to use, the capability — as U S WEST explained in considerable detail in its comments. Consequently, deployment of Phase I should be based entirely on good faith negotiations between public safety organizations, wireless carriers, and landline carriers. A local public safety organization may decide that it wants this capability deployed as soon as possible; it may decide it wants the capability deployed in 18 months; or it may

⁵ See Agreement at ¶ 1.

⁶ Indeed, U S WEST's landline and cellular subsidiaries are currently testing this capability. While the testing is not complete, early results are promising.

⁷ See Agreement at 1 n.1.

⁸ Because Phase I involves the use of pseudo-ANI in identifying cell site information, the participation of the dominant landline LEC will generally be required to support the availability of this capability. It is therefore essential that this carrier be at the negotiating table.

decide that it has no need of the capability at all. The point is that details of deployment in a given locality are best left to the impacted parties (as opposed to either national trade associations or this Commission). At this time, the Commission should only clarify that local public safety organizations have a right to request negotiations and that carriers have an obligation to engage in good faith negotiations — an obligation that requires carriers to meet the needs of local public safety organizations in a time frame the local organizations are capable of meeting.

B. <u>Phase I Cost Recovery</u>. The Agreement appears to overlook cost recovery issues for Phase I.¹⁰ While the costs incurred to deploy Phase I are small in relation to the Phase II costs, the Phase I deployment costs are not insignificant — for both wireless and landline carriers.

Carriers have a legal right to recover their costs in providing a new service or capability.¹¹ Local public safety organizations may likewise be interested in pursuing ways

⁹ It may, for example, cost carriers more to deploy Phase I capabilities in six months than in 12 or 18 months. In these circumstances, the local public safety organization will have to decide whether there is value in receiving the new capability earlier and whether adequate funding exists to support earlier deployment.

The Agreement states that "[t]he Wireless Industry has indicated that the relatively small additional expense involved in Phase I would not require advance adoption of public funding mechanisms." Id. at 3 n.9. U S WEST does not share this view, given that wireless carriers must install new, inefficient trunk groups. What is more, much of the cost necessary to deploy Phase I will be incurred by landline carriers which must translate the cell site "pseudo-ANI" and make routing decisions based upon the translated data — a fact apparently overlooked in the Agreement.

¹¹ As U S WEST explains in another filing submitted on this date, the Fifth Amendment to the U.S. Constitution imposes limits on the Commission's flexibility to impose new obligations on carriers. Specifically, the Commission cannot take the property of a private carrier without adequate compensation. See U S WEST Comments, Docket No. 95-185, at 49-53 (filed March 4, 1996).

of recovering their additional costs incurred in modifying (or replacing) their equipment to handle new capabilities.

The Phase I cost recovery issue may be resolved by the simple expedient of applying to wireless customers the same E911 surcharge imposed on many landline customers. The point is, once again, these kinds of details are best left to the local public safety organizations and impacted carriers so they retain the flexibility to devise a solution that best meets the needs of the parties in each particular situation. Clearly, a "one solution fits all approach" adopted by national associations or this Commission is neither workable nor desirable.

III. PHASE II ISSUES

As now defined, Phase II specifies that, "no longer than 5 years from the FCC's adoption of rules," wireless carriers will achieve "the ability to locate, in latitude and longitude, a wireless caller within 125 meters Root Mean Square (RMS)." The national public safety groups acknowledge that:

- This Phase no longer includes the dimension of altitude; 13
- There may be certain areas, "represent[ing] entire serving areas," where the 125-meter standard "may be difficult or impossible to meet;" 14 and

¹² See Agreement at 2 ¶ 3.

¹³ Id. at 2 n.4.

¹⁴ Id. at 3 ¶ 4.

 A cost recovery mechanism is needed to fund carrier and public safety involvement and that this mechanism must be developed before capital is expended on Phase II.¹⁵

U S WEST questions the need for the reference to deployment of Phase II "no longer than 5 years from the FCC's adoption of rules." U S WEST is troubled by this reference to the extent it suggests that wireless carriers have an obligation to deploy two-dimensional location capability even in areas where the local public safety organization has no interest in, or capability to use, this location capability. ¹⁶

This Commission and the signatories to the Agreement need to understand that, absent new developments in technology, there will be vast areas where wireless location identification will not be possible.¹⁷ The Agreement proposes that wireless location be performed by a method commonly known as "triangulation" — where a mobile handset is located by its distance from two or three cell sites.

Limited triangulation is promising in many urban areas, where carriers generally deploy a significant number of cell sites and those sites are often designed so that a caller can be served simultaneously from two sites.¹⁸ However, triangulation is much less

^{15 &}lt;u>Id</u>. at 3 ¶ 1.

¹⁶ U S WEST does not believe this is the intent of the Agreement, given the acknowledgment that cost recovery issues must be addressed before Phase II is deployed. Nevertheless, it is possible that some could misinterpret the intent of the Agreement, and future conflict could be avoided by Commission clarification now.

¹⁷ For example, Code Division Multiple Access ("CDMA") radio technology can provide distance measurements within 0.8 microseconds, which equate to approximately 660 feet. However, this technology is unable to distinguish direction (latitude and longitude).

¹⁸ Two-way hand off is a predominant design in urban areas, although there are limited areas where three-way hand off is possible. Consequently, biangulation will be more prevalent than triangulation.

promising in rural and some suburban areas, because there will be many fewer instances where callers will be located in overlapping cell site coverage areas.

These technological limitations mean that automatic location identification will be less successful (and less valuable) in some geographic areas than others. This fact reinforces the need that decisions over automatic location identification deployment be made locally, by the impacted public safety organizations and carriers, rather than in Washington, D.C. by national trade associations or this Commission.¹⁹

IV. OTHER ISSUES

This section addresses a variety of miscellaneous issues involving the availability of enhanced 911 capabilities for wireless consumers.

1. Resolution of Disagreements. Local or regional negotiations will involve a multiplicity of parties: several public safety organizations, one or more landline companies, and multiple wireless carriers. It is unrealistic to think that, in each negotiation, consensus will be reached in all circumstances in all areas. For example, differences may arise between adjacent local public safety organizations having different needs which could impose incompatible requirements on carriers. It is therefore essential that a dispute resolution procedure be developed.

¹⁹ In its comments, U S WEST recommended that local public safety organizations be permitted to submit a bona fide request for automatic location identification "within four years of the Commission's order in this proceeding." U S WEST Comments, Docket No. 94-102, at 22. U S WEST believes this condition is no longer needed. While vendors still have much development work remaining, early discussions between local public safety organizations and the carrier industry, even if preliminary only, may prove beneficial to all involved to help identify future needs and to begin the important planning process.

U S WEST believes that, at least in the first instance, state regulatory commissions should be allowed to address any disputes. The negotiations will involve local issues, and the states are best equipped to address these issues. This is, moreover, the process Congress adopted in the Telecommunications Act of 1996.²⁰ This Commission can become involved if a state commission fails to act or takes action inconsistent with federal policies.

- 2. TTY Devices. The Agreement's signatories state that the Phase I capabilities should "be available to speech- and hearing-impaired individuals through means other than voice-only mobile radio handset, such as text telephone (TTY) devices." U S WEST agrees. However, this Commission needs to be aware that CDMA vendors have been unable, to date, to represent to U S WEST that their CDMA vocoders can pass through Bodott frequency signaling over the traffic channel without distortion. As U S WEST is not a manufacturer, it does not know when this capability might become available.
- 3. <u>Legal Liability Issues</u>. The Agreement's signatories ask the Commission to "address and resolve carrier and PSAP legal liability issues." However, the Agreement does not appear to address one of the most important issues: protection from negligence liability.

²⁰ See new Section 252.

²¹ Agreement at 4.

²² Agreement at 4.

Public safety organizations will be asking carriers to expend their resources to provide a benefit to them using an unproven technology. In these circumstances, it would be most inequitable to hold carriers (or their vendors) liable for mere negligence or unintentional errors in providing a public service requested by the government. If the government wants the private industry to expend its finite capital for the benefit of the government, at minimum it should protect the private industry from negligence lawsuits stemming from its mandate. Consequently, any deployment obligation on carriers should be imposed only after the requesting public safety organization either agrees to indemnify carriers and their vendors for negligence and unintended errors or obtains immunity for carriers and vendors.²³ U S WEST (and, it is confident, other carriers) will cooperate with public safety organizations in getting appropriate legislation adopted in the States.

4. Nondiscriminatory 911 Taxes/Fees. The Agreement's signatories ask the Commission to state that 911 "fees or taxes should not discriminate between wireline and wireless carriers involved in the delivery of 9-1-1 services." U S WEST wholeheartedly agrees that 911 fees must be nondiscriminatory, but it believes the benchmark should be on the charges imposed on subscribers (landline or wireless), not on carriers.

There are material differences between landline and wireless technologies, differences which impact available 911 capabilities and differences which impact deployment

²³ Of course, carriers and vendors would remain liable for intentional or wanton and malicious conduct.

²⁴ Agreement at 3-4.

costs. Because of differences in technology, it may, for example, cost more to deploy a given capability in a wireless network than in a landline network.

The public interest is served when the public is afforded the full array of enhanced 911 services desired by a community. If a community decides that certain enhanced 911 capabilities should be available from both landline phones and wireless handsets, a 911 surcharge should be imposed on all phones and handsets and the surcharge should be the same for all members of the public.²⁵

V. CONCLUSION

CTIA and three national public safety organizations have proposed a new "process" for the deployment of new, enhanced wireless 911 capabilities. U S WEST supports the process insofar as it recognizes the importance of good faith negotiations between the impacted parties. U S WEST opposes any process to the extent it suggests that there is only one solution that meets the needs of every local public safety organization and that this "one size fits all" solution is best developed by trade association representatives or regulators located in Washington, D.C. Rather, the details of 911 deploy

²⁵ This approach is consistent with that adopted by Congress for universal service. See new Section 254.

ment should continue to be left to the entities impacted: local public safety organizations and carriers serving the locality.

Respectfully submitted,

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March 4, 1996

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I, Kelseau Powe, Jr., do hereby certify that on this 4th day of March, 1996, I have caused a copy of the foregoing U S WEST'S SUPPLEMENTAL

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